

CHAPTER 6 - PLAN IMPLEMENTATION

To meet the goals and objectives for the Refuge, the Plan details thirty specific projects for acquisition, development, or restoration over the next fifteen years. Projects have been categorized by type of benefit and prioritized within the fifteen year time frame of the Plan.

Acquisition of land is also a necessary component of building the Refuge. The Refuge intends to acquire 7,500 acres over the next fifteen years. To assist in the acquisition of land and the creation of the thirty projects, alternative funding services are suggested for Refuge use.

RESOURCE DEVELOPMENT PROJECTS

As noted above, individual improvement projects have been identified for implementation over the life of this Plan. Projects range from buildings renovation for educational use to restoration of springs. All of these projects have been developed for the purpose of achieving the vision for the Refuge that was articulated in an earlier section of this document. Each project provides a variety of benefits related to the environment, education/recreation (public use), or the local economies. Also, the priorities that are associated with them vary according to need and/or anticipated impacts.

Listed on the following page are all projects proposed for implementation within the Refuge over the next fifteen years, their priority for development and an indication of the principal benefits that will be derived from them. The Project Location Map which follows the listing of projects illustrates where these projects will be found within the Refuge. Furthermore, a detailed description of each project is provided in Appendix D.

PRIMARY BENEFITS

"A" Projects		Benefits		
	Project	Habitat	Education/Recreation	Economy
A1	Forest Restoration (1997-2001)	✓		
A2	Wetland Restoration	✓		
A3	Unique Natural Communities Restoration	✓		
A4	Mounds Boat and Bicycle Access		✓	✓
A5	Tamms Boat Access		✓	✓
A6	Cache River Wetlands Center		✓	✓
A7	Shawnee College Outdoor Learning Site		✓	
A8	Bellrose Public Access & Outdoor Classroom		✓	✓
A9	Maintenance Equipment	✓	✓	
A10	Cache Levee Access & Canoe Trail		✓	✓
A11	Boyd Seed Orchard & Outdoor Classroom	✓	✓	
A12	Signs, Brochures and Maps		✓	✓
"B" Projects				
B1	Forest Restoration (2002-2006)	✓		
B2	Wetland Restoration	✓		
B3	Unique Natural Communities Restoration	✓		
B4	Moist Soil Unit Development	✓		
B5	Hogue Woods Public Access & Outdoor Classroom		✓	✓
B6	Road Closures	✓	✓	
B7	Primitive Access Sites		✓	✓
B8	Poole Public Access Area		✓	✓
B9	Cultural Resource Surveys/Plans		✓	✓
B10	Brushy Public Access Area		✓	✓
B11	Oral History of the Cache	✓	✓	
"C" Projects				
C1	Forest Restoration (2007-2011)	✓		
C2	Wetland & Stream Restoration	✓	✓	
C3	Unique Natural Communities Restoration	✓		
C4	Bicycle Trail Connections		✓	✓
C5	Cache Wetlands Maintenance Facility		✓	✓
C6	Rolwing Cabin Outdoor Classroom		✓	
C7	Refuge Overlooks		✓	
C8	Auto Tour Route		✓	✓

PROJECT COST SUMMARY - REFUGE PROJECT PRIORITIES

<u>"A" PROJECTS</u>		TOTAL COST	AVERAGE ANNUAL MAINTENANCE
A1	Forest Restoration (1997-2001)	\$ 1,204,000	\$ 2,300
A2	Wetland Restoration	30,000	0
A3	Unique Natural Communities Restoration	6,800	250
A4	Mounds Boat and Bicycle Access	91,950	3,300
A5	Tamms Boat Access	61,400	3,100
A6	Cache River Wetlands Center	14,593,500	75,000
A7	Shawnee College Outdoor Learning Site	50,250	900
A8	Bellrose Public Access & Outdoor Classroom	172,250	7,800
A9	Maintenance Equipment	376,420	10,000
A10	Cache Levee Access & Canoe Trail	42,025	2,200
A11	Boyd Seed Orchard & Outdoor Classroom	258,000	2,500
A12	Signs, Brochures and Maps	<u>72,500</u>	<u>350</u>
	<i>Subtotal</i>	\$ 16,959,095	\$ 107,700
 <u>"B" PROJECTS</u>			
B1	Forest Restoration (2002-2006)	\$ 805,000	\$ 2,300
B2	Wetland Restoration	40,000	0
B3	Unique Natural Communities Restoration	10,200	450
B4	Moist Soil Unit Development	1,162,150	5,610
B5	Hogue Woods Public Access & Outdoor Classroom	93,025	3,350
B6	Road Closures	11,250	1,100 (one time cost)
B7	Primitive Access Sites	44,900	1,325
B8	Poole Public Access Area	103,550	3,150
B9	Cultural Resource Surveys/Plans	109,250	0
B10	Brushy Public Access Area	176,800	7,500
B11	Oral History of the Cache	<u>13,200</u>	<u>0</u>
	<i>Subtotal</i>	\$ 2,569,325	\$ 24,785
 <u>"C" PROJECTS</u>			
C1	Forest Restoration (2007-2011)	905,625	2,300
C2	Wetland & Stream Restoration	2,682,700	10,000
C3	Unique Natural Communities Restoration	13,200	450
C4	Bicycle Trail Connections	1,030,550	1,035
C5	Cache Wetlands Maintenance Facility	2,115,000	75,000
C6	Rolwing Cabin Outdoor Classroom	104,150	760
C7	Refuge Overlooks	35,325	3,840
C8	Auto Tour Route	<u>123,000</u>	<u>1,945</u>
	<i>Subtotal</i>	\$ 7,009,550	\$ 95,330
	<i>Grand Total (Rounded)</i>	\$ 26,500,000	\$ 228,000

FUNDING AND STAFFING SUMMARY

Over the next 15 years, there is nearly \$27,000,000 worth of projects recommended for the Refuge (see Project Cost Summary - Refuge Project Priorities on the following page). These projects range from acquisition of land, development of boat ramps and public use facilities, a new wetlands center, and numerous restoration projects.

As discussed, the projects have been divided into "A", "B" and "C" priority projects. Given that this is a 15 year plan, the projects have been separated equally into five-year periods beginning in 1996.

With regard to staffing, the plan recommends that the Refuge staff will increase over the 15 year period from six people currently, to nineteen. This represents a significant management cost that must be considered. Staffing needs under full development are proposed to be covered by the Project partners (i.e., Illinois Department of Natural Resources, The Nature Conservancy, Southernmost Illinois Tourism, Citizens Committee to Save the Cache River, etc.) Recommended staffing under full development is outlined in the following table. Positions highlighted with an "*" are proposed to be filled by agencies/organizations outside the Service.

RECOMMENDED REFUGE STAFFING UNDER FULL DEVELOPMENT

Refuge Manager	1
Refuge Ops. Spec.	1
Wildlife Biologist	1
Administrative Tech	1
Maintenance Worker	2
Maintenance Worker	2* (Partner Position)
Tractor Operator	1
Tractor Operator	1* (Partner Position)
Environ. Ed./Program Spec.	1
Biological Tech.	1
Volunteer Coord.	1* (Partner Position)
Center/Facility Mgr.	1
Maintenance/Exhibits/Facility	1
Maintenance/Grounds	1
Program Staff (EE/Interp)	1
Program Staff (EE/Interp)	1* (Partner Position)
Program/Publicity	1* (Partner Position)
Total	19 Staff (14 FWS plus 5 Partner Positions)

FUNDING SOURCES

To bring the vision of the Refuge to reality, a number of sources must be tapped to provide funding, volunteer assistance, and partnering. A list of funding sources and potential uses follows:

- ❖ U. S. Army Corps of Engineers
 - Design assistance on hydrology studies
 - Construction of wetlands, hydrological projects
 - Environmental management program
- ❖ State
 - Illinois Department of Natural Resources: Open Space Land Acquisition and Development (OSLAD) grants to acquire outdoor recreation areas
 - Illinois Bicycle Path Grant Program Boat access area development program
 - National Recreation Trails Fund Act
 - Illinois Department of Transportation ISTEA program (funding tentative) Coordination: State Highway Roadside Mgmt. Conservation 2000
- ❖ Others
 - Southern Five Regional Planning: Planning assistance for grants
 - District and Development Commission
 - Interagency connections
 - Integration into Southern Five Geographic Information System
 - Waste management coordination between communities in the Cache River Watershed
 - Cooperation and joint use of equipment, personnel, facilities, land, etc.

❖ Foundations

The following are foundation grant sources in Illinois that have a history of contributions to environmental projects and issues:

- Environmental/Cultural - McKnight Foundation, Minneapolis, Minnesota
- Environmental/Cultural - Joyce Foundation, Chicago, Illinois
- Environmental/Cultural - MacArthur Foundation, Chicago, Illinois

❖ Volunteer/Citizens Groups

- SIU-C and Shawnee Community College - Team with universities on environmental education programs, biological studies, wildlife programs
- Touch of Nature - Continue to facilitate and provide access for Touch of Nature programs
- Citizens Committee to Save the Cache - Continue to